

## STATE OF WASHINGTON

## STATE BUILDING CODE COUNCIL

1500 Jefferson Street • P.O. Box 41449 • Olympia, Washington 98504-1449 (360) 407-9280 • fax (360) 586-5366 • e-mail sbcc@cted.wa.gov • www.sbcc.wa.gov

## November 2012 Motions for Rule Making Actions

Main Motion: Adopt 2012 Energy Code as proposed in WAC 51-11R and 51-11C; repeal WAC 51-11

Amendment to the main motion:

Modify amendment to:

Adopt clarifications to Table C407.5.1(3) Footnote h:

h. **Electric heat pump:** Electric air-source heat pumps shall be modeled with electric auxiliary heat. The system shall be controlled with a multistage space thermostat and an outdoor air thermostat wired to energize auxiliary heat only on the last thermostat stage and when outdoor air temperature is less than 40°F. In heating operation the system shall be controlled to operate the heat pump as the first stage of heating, before energizing the electric auxiliary heat, down to a minimum outdoor air temperature of 35°F for System No. 8 or 17°F for System No. 9. If the Proposed Design utilizes the same system type as the Standard Design (PTHP or PSZ-HP), the Proposed Design shall be modeled with the same minimum outdoor air temperature for heat pump operation as the Standard Design. For temperatures below the stated minimum outdoor air temperatures the electric auxiliary heat shall be controlled to provide the full heating load.

**Rationale:** Clarification is required so that air-source heat pumps with auxiliary heat are modeled consistently. As the proposed system often is not always the same as the code baseline system this can have a large impact on the modeling results.

Note: The 17 °F limit is based on Table 6.8.1B ASHRAE 90.1-2010. The 35°F limit is based on the manufacturer's data.